

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method to protect a kidney in a mammalian patient comprising:
 - a. artificially increasing renal pelvis pressure including increasing pressure in a urinary tract of at least one kidney of the patient;
 - b. reducing a renal function of the kidney by maintaining the increased pressure, and
 - c. reducing the pressure in the urinary tract to increase the renal function above the reduced renal function.
2. (Original) A method as in claim 1 wherein the increase of pressure in the urinary tract is temporary.
3. (Original) A method as in claim 1 wherein the increase in the pressure in the urinary tract is reversible.
4. (Original) The method as in claim 1 wherein the urinary tract pressure is increased at least to a pressure of 10 to 20 cmH₂O above a pressure level in the urinary tract prior to the artificial increase in pressure.
5. (Original) The method as in claim 1 wherein the urinary tract pressure is increased prior to

the administration of a contrast agent to the patient.

6. (Original) The method as in claim 5 wherein the urinary tract pressure is increased to protect the kidney from an insult.

7. (previously presented) The method as in claim 1 wherein the urinary tract pressure is increased prior to surgery and the increased pressure is reduced after the surgery.

8. (Original) The method as in claim 1 wherein the urinary tract pressure is increased for at least one hour.

9. (Original) The method as in claim 1 wherein the urinary tract pressure is increased by artificially infusing fluid into a bladder of the patient.

10. (Original) The method as in claim 9 wherein infused fluid flows into the bladder of the patient without first flowing through the kidney.

11. (Original) The method as in claim 9 wherein the infused fluid flows into the bladder through a urethra of the patient prior to entering the bladder.

12. (Withdrawn) The method as in claim 9 further comprising maintaining an increased pressure in the bladder by applying an elevated pressure to the infused fluid in the bladder.

13. (Withdrawn) The method as in claim 12 wherein the elevated pressure of the infused fluid is applied by gravity.

14. (Withdrawn) The method as in claim 12 wherein the infused fluid flows from a container elevated above the patient and flows from the container into the bladder.

15. (Withdrawn) The method as in claim 14 wherein the container is elevated about the patient a distance in a range of range of 13 centimeters(cm) to 140 cm above the patient.

16. (Withdrawn) The method as in claim 14 wherein the infused fluid flows from the container into the bladder due to gravity.

17. (Original) The method as in claim 1 wherein increasing the urinary tract pressure further comprises artificially distending the bladder of the patient.

18. (Original) The method as in claim 17 wherein artificially distending the bladder further comprises artificially infusing fluid into the bladder.

19. (Withdrawn) The method as in claim 1 wherein increasing the urinary tract pressure further comprises at least partially obstructing a flow of urine from the kidney and through the urinary tract.

20. (Original) The method as in claim 1 wherein increasing the urinary tract pressure further comprises at least partially obstructing a flow of urine from the bladder.

21. (Original) A method to prevent or treat contrast nephropathy in a mammalian patient undergoing a radiographic procedure comprising: a. artificially increasing pressure in a urinary tract of at least one kidney of the patient; b. injecting the contrast agent into a blood vessel of the patient, and c. reducing pressure in the urinary tract of the kidney.

22. (Original) A method as in claim 21 further comprising reducing a renal function of the during a period in which the contrast agent is in the blood of the patient.

23. (previously presented) A method as in claim 21 further comprising, prior to step (a), identifying the patient from a group of patients suffering from one or more of a group of illnesses consisting of chronic renal disease, diabetes and old age, wherein the identified patient is determined to be at particular risk during injection of a contrast agent.

24. (Original) A method as in claim 21 wherein reducing the pressure returns the urinary tract to a pressure that existed before injection of the contrast agent.

25. (Original) A method as in claim 21 wherein the increase of pressure in the urinary tract is temporary.

26. (Original) A method as in claim 21 wherein the increase in the pressure in the urinary tract is reversible.

27. (Original) A method as in claim 21 wherein steps (a), (b) and (c) are preformed sequentially.

28. (Original) The method as in claim 21 wherein the urinary tract pressure is increased at least to a pressure of 10 to 20 cmH₂O above a pressure level in the urinary tract before step (a).

29. (Original) The method as in claim 21 wherein the urinary tract pressure is increased prior to the administration of the contrast agent to the patient.

30. (Original) The method as in claim 29 wherein the urinary tract pressure is a pressure in a bladder of the patient.

31. (Original) The method as in claim 21 wherein the urinary tract pressure is increased for at least one hour.

32. (Original) The method as in claim 21 wherein the urinary tract pressure is increased by artificially infusing fluid into a bladder of the patient.

33. (Original) The method as in claim 32 wherein the infused fluid flows into the bladder of the patient without first flowing through the kidney.

34. (Original) The method as in claim 32 wherein the infused fluid flows into the bladder through a urethra of the patient prior to entering the bladder.

35. (Withdrawn) The method as in claim 33 further comprising maintaining an increased pressure in the bladder by applying an elevated pressure to the infused fluid in the bladder.

36. (Withdrawn) The method as in claim 35 wherein the elevated pressure of the infused fluid is applied by gravity.

37. (Withdrawn) The method as in claim 36 wherein the infused fluid flows from a container elevated above the patient and flows from the container into the bladder.

38. (Withdrawn) The method as in claim 37 wherein the container is elevated about the patient a distance in a range of range of 13 centimeters(cm) to 140 cm above the patient.

39. (Withdrawn) The method as in claim 37 wherein the infused fluid flows from the container into the bladder due to gravity.

40. (Withdrawn) The method as in claim 37 further comprising regulating a flow of the infused fluid into the bladder by an adjustable pump.

41. (Withdrawn) The method as in claim 35 wherein increasing the urinary tract pressure further comprises artificially distending the bladder of the patient.

42. (Withdrawn) The method as in claim 41 wherein artificially distending the bladder further comprises artificially infusing fluid into the bladder.

43. (Withdrawn) The method as in claim 35 wherein increasing the urinary tract pressure further comprises at least partially obstructing a flow of urine from the kidney and through the urinary tract.

44. (Withdrawn) The method as in claim 35 wherein increasing the urinary tract pressure further comprises at least partially obstructing a flow of urine from the bladder.

45. (Currently Amended) A method to inhibit a natural function of a kidney of a patient during surgery comprising: a. artificially increasing renal pelvis a pressure including increasing pressure in a urinary tract of at least one kidney of the patient, b. performing the surgery on the patient, and c. reducing pressure in the urinary tract of the kidney to substantially a pressure level existing before step (a).

46. (Original) A method as in claim 45 wherein the increase of pressure in the urinary tract is temporary.

47. (Original) A method as in claim 45 wherein the increase in the pressure in the urinary tract is reversible.

48. (Original) The method as in claim 45 wherein the urinary tract pressure is increased at least to a pressure of 10 to 20 cmH₂O above a pressure level in the urinary tract prior to step (a).

49. (Original) The method as in claim 45 wherein the urinary tract pressure is a pressure in a bladder of the patient.

50. (Original) The method as in claim 45 wherein the urinary tract pressure is increased for at least one hour.

51. (Original) The method as in claim 45 wherein the urinary tract pressure is increased by artificially infusing fluid into a bladder of the patient.

52. (Original) The method as in claim 51 wherein the infused fluid flows into the bladder through a urethra of the patient prior to entering the bladder.

53. (Withdrawn) The method as in claim 51 further comprising maintaining an increased pressure in the bladder by applying an elevated pressure to the infused fluid in the bladder.

54. (Withdrawn) The method as in claim 53 wherein the elevated pressure of the infused fluid is applied by gravity.

55. (Withdrawn) The method as in claim 54 wherein the infused fluid flows from a container elevated above the patient and flows from the container into the bladder.

56. (Withdrawn) The method as in claim 55 wherein the container is elevated about the patient a distance in a range of range of 13 centimeters(cm) to 140 cm above the patient.

57. (Withdrawn) The method as in claim 51 further comprising regulating a flow of the infused fluid into the bladder by an adjustable pump.

58. (Original) The method as in claim 45 wherein increasing the urinary tract pressure further comprises artificially distending the bladder of the patient.

59. (Original) The method as in claim 58 wherein artificially distending the bladder further comprises artificially infusing fluid into the bladder.

60. (Withdrawn) The method as in claim 45 wherein increasing the urinary tract pressure

further comprises at least partially obstructing a flow of urine from the kidney and through the urinary tract.

61. (Original) The method as in claim 45 wherein increasing the urinary tract pressure further comprises at least partially obstructing a flow of urine from the bladder.

62. (Cancelled)

63. (Cancelled)

64. (Original) The method as in claim 45 wherein steps (a), (b) and (c) are preformed in sequence.

65. (Original) The method as in claim 45 wherein the surgery begins prior to increasing the pressure in the urinary tract.

66. (Original) The method as in claim 45 wherein the surgery is substantially completed before reducing the pressure in the urinary tract.

67. – 97. (Cancelled)